ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL]

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

FOR SOURCE CATEGORY: Gasoline Distribution (Stage I)

AGENCY: Environmental Protection Agency(EPA).

ACTION: Announcement of the availability of supplemental information, and reopening of public comment period on the supplemental information.

SUMMARY: On February 8, 1994 (59 FR 5868), the EPA proposed standards (the proposal or proposed standards) to limit emissions of hazardous air pollutants (HAP's) from existing and new bulk gasoline terminals and pipeline breakout stations under section 112 of the Clean Air Act as amended in 1990 (Act). The public comment period on the proposed rule ended April 11, 1994. This action announces the availability of supplemental information and the reopening of the comment period for comment on only the supplemental information. This supplemental information was provided during the comment period on the proposal and pertains to the level of control and test procedures for tank truck

leakage. The EPA plans to consider comments received on this action, along with the comments received on the proposal, and take final action on the rule on November 23, 1994 as required under consent decree. Due to this short schedule, only a 30-day comment period is being provided and no public hearing will be held.

DATES: Comments must be received on or before [insert date 30 days after publication in the Federal Register].

ADDRESSES: Comments. Comments should be submitted (in duplicate, if possible) to: Air Docket Section (6102), ATTN: Docket No. A-92-38, Room M1500, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, and Mr. Stephen Shedd, address shown in FOR FURTHER INFORMATION CONTACT section of this notice.

Docket. Docket No. A-92-38, containing supporting information used in developing the proposed standards, public comments received on the proposal, and the test procedures and methods discussed in today's notice, is available for public inspection and copying between 8:30 a.m. and 3:30 p.m., Monday through Friday, at the EPA's Air Docket Section, Waterside Mall, Room 1500, 1st Floor, 401 M Street, SW, Washington, DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: For information concerning today's notice, contact Mr. Stephen Shedd at (919) 541-5397, Chemicals and Petroleum Branch, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

SUPPLEMENTARY INFORMATION: On February 8, 1994 (59 FR 5868), the EPA proposed standards to limit emissions of hazardous air pollutants (HAP's) from existing and new bulk gasoline terminals and pipeline breakout stations under section 112 of the Act. Two comment letters presented information on California standards for tank truck leaks at existing facilities that are more stringent than those standards proposed by the EPA. The EPA proposed that tank trucks and railcars annually pass a pressure and vacuum test before loading gasoline at existing and new major source facilities. The California standards have a more stringent requirement for the annual test, an additional annual test for internal vapor valves, and a year-round leak rate requirement and test procedures. Additionally, the EPA proposed for new facilities the use of a loading rack vacuum assist system, in addition to the proposed annual pressure and vacuum test, to further control leakage from tank trucks and railcars. The EPA did not analyze nor fully discuss these California standards during development of the

proposal or at proposal. The purpose of this notice is to announce and discuss the consideration of these additional standards. Below is a discussion of the California standard for tank truck leakage and the EPA's consideration of that information. As noted in the ADDRESSES section of today's notice, the docket (Docket No. A-92-38) contains the California test procedures and methods discussed below.

The California Air Resources Board (ARB) and the California air pollution control districts have been implementing tank truck leakage standards since the late 1970's. Currently all tank trucks transporting gasoline in California, including tank trucks from neighboring States that operate in California, must meet the California standards. In summary they include three major standards, an annual certification and a year-round standard for the tank and its vapor piping and hoses and a year-round pressure standard for the tank truck's internal vapor valve. The annual certification standards include initially pressurizing and later evacuating the tank and associated vapor piping and hoses, to 18 inches of water and to 6 inches of water, respectively. In 5 minutes the allowable pressure change can be no more than the values shown in Table 1. The EPA's Control Techniques Guideline (CTG) document and New Source Performance Standards (NSPS) (40 CFR

part 60, subpart XX) contain annual pressure and vacuum test levels of initial pressures and test duration which are the same as California's. However, a less stringent pressure change of 3 inches of water column is allowed for all tank trucks under the NSPS, CTG, and proposal.

Table 1. Allowable Tank Pressure Change

Tank or Compartment Capacity (Gallons)	Allowable Pressure Change Per Tank or Compartment Tested (inches of water, gauge, per 5 minutes)	
	Annual Certification	Year-Round (not to be exceeded anytime)
2,500 & Up	1	2.5
2,499 - 1,500	1.5	3.0
1,499 - 1,000	2.0	3.5
999 - less	2.5	4.0

Table 1 presents a year-round allowable pressure change standard that is 1.5 inches of water column higher than annual certification allowable pressure change. This year-round standard is periodically demonstrated by a combustible gas detector method or the annual certification test procedure (using the allowable year-round pressure change value) by owners and operators and used by the California ARB and districts for audits and compliance, respectively.

Combustible gas detectors are easy to use and transport and can be used in the field while trucks are loading gasoline. The annual certification pressure/vacuum test procedure requires the tank to be taken out of gasoline service and requires more test equipment than the combustible gas detector method. Therefore, the combustible gas detector method provides an easy-to-use field compliance procedure. Tank trucks with a leak found above 100 percent of the lower explosive limit (LEL) on a combustible gas detector are required to be taken out of service until they pass the allowable year-round pressure change using the annual certification test method. If the truck fails both tests, the truck owner is fined and the tank is not allowed to return to service until it meets the annual certification standard. Those tanks found to have leaks above 100 percent of the LEL and found to meet the year-round allowable pressure change with the annual certification test procedure are not penalized if maintenance is not performed before the pressure test. A similar combustible gas detector procedure was presented in the EPA's CTG, but is not contained in the NSPS or this proposed NESHAP. However, some other States and oil companies are using this detector procedure as a compliance method, in addition to the annual pressure and vacuum tests. The Bay Area Air Quality Management District

(BAAQMD) developed a field pressure test procedure that measures the pressure change without taking the tank out of service. Nitrogen gas is used to pressurize the tank's vapor head space. This field pressure test method was determined by the California ARB in 1986 to be equivalent to the combustible gas detector method. Since 1986, the BAAQMD has implemented a comprehensive outreach program with the field pressure test. Operators are instructed in the field test procedure, and participate in an ongoing inspection and maintenance program. Participation is voluntary, and the incentive is to reduce the penalties for violations by having documentation showing a history of regular tests and maintenance on the tank truck.

The third California standard for tank trucks is the annually tested certification pressure test on the tank truck's internal vapor valve. This valve provides a seal between the truck's tank and its vapor piping and connected hose. For this test, the tank and associated vapor piping and hose are pressurized to 18 inches of water column, and the valve is then closed. Then, while leaving the tank under pressure, the pressure in the tank truck's vapor collection piping and vapor hose is released to atmospheric pressure and then capped. After 5 minutes, a pressure increase of no more than 5 inches of water column is allowed

to occur downstream of the valve in the tank truck's vapor piping and hose. Any pressure increase indicates that the valve is leaking. This leakage would eventually be released to the atmosphere when the vapor hose and piping are not connected to a vapor collection system. This standard for internal vapor valves is not contained in the CTG, the NSPS, or the proposed standard.

The California ARB is currently revising its tank truck standards to change the level of the annual test and is updating its test procedures and methods. The BAAQMD tested 200 tank trucks and found that 86 percent of the trucks could pass a 0.25-inch standard and 91 percent could pass a 0.5-inch standard. The California ARB proposed that the allowable annual certification's allowable pressure change be reduced by 50 percent (1-inch drop is proposed to be reduced to a 0.5-inch, etc.). Besides general updating and clarifications of the test procedures and methods, the California ARB is adding the field pressure test used by BAAQMD in the ARB certification procedures.

Under section 112 of the Act, the minimum baseline (floor) at which standards may be set, for existing sources, is the "average emission limitation achieved by the best performing 12 percent of the existing sources"(section 112(d)(3)of the Act). The existing California standards are

used statewide and on tank trucks from surrounding areas. California is estimated to account for nearly 12 percent of the national gasoline consumption. Since trucks in California and surrounding areas transport about 12 percent of the national gasoline, it is logical to assume that this represents about 12 percent of the affected gasoline tank truck population. The EPA looks at emission limitations achieved by each of the best performing 12 percent of existing sources, and average those limitations (59 FR 29196). "Average" is interpreted to mean a measure of central tendency such as the arithmetic mean or median. In the case of the California standards, nearly or about 12 percent of tank trucks at least meet or exceed the California standards, therefore these standards are at least the arithmetic average, and certainly the 94 percentile or median. Additionally, the existing California standards achieve the lowest emission limitation (in this case by achieving the lowest leakage rates) and are the best performing of existing sources. Thus, the EPA now considers the existing California standards as the existing source floor since they represent the average emission limitation achieved by the best performing 12 percent of the existing sources.

The EPA proposal contains a requirement to operate a vacuum assist system at new source facilities. The agency proposed this requirement for new sources based on the system providing "emission control that is achieved in practice by the best controlled similar source" (section 112(d)(3)of the Act). Many commenters questioned the amount of emission control that would be achieved by the vacuum assist system. In the EPA's consideration of the vacuum assist system as the floor for new sources, the EPA will also consider the existing California standards discussed earlier.

Through consideration of comments received on today's notice along with those on the proposed rule, the EPA will determine the control levels to be applied to tank truck leakage. Today's opening of the comment period is only for taking comment on the supplemental material contained in this notice on tank truck vapor leakage controls. Specifically, the EPA is requesting comments and data on the consideration of the existing California standards as the floor level of control for new and existing facilities as required under section 112 of the Act. The EPA is also requesting comment on whether the level of control for tank trucks at new and existing facilities should be based on the existing or the proposed California standards. Comments are

also requested on the use and accuracy of the test procedures and methods referred to earlier and provided in the docket, including both the existing and updated or revised procedures and methods.

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Date

Mary D. Nichols
Assistant Administrator,
Office of Air and Radiation